

GEOLOGIC MAP OF THE OXNARD 7.5' QUADRANGLE VENTURA COUNTY, CALIFORNIA: A DIGITAL DATABASE

VERSION 1.0

By

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Digital Database

by:

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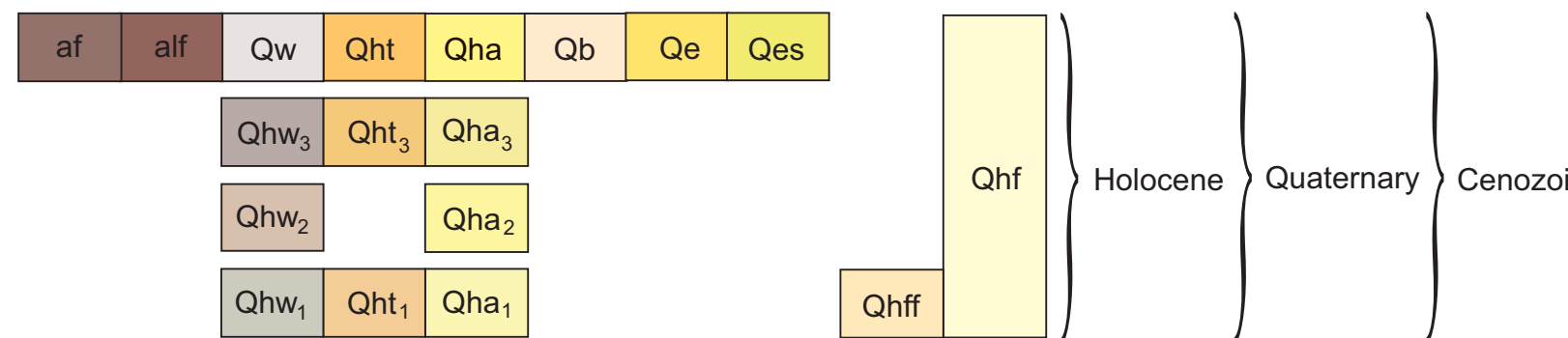
2003



EXPLANATION OF MAP UNITS

- af** Artificial fill; may be engineered and/or non-engineered.
- alf** Artificial levee fill; may be engineered and/or non-engineered.
- Qw** Active wash deposits within major river channels; composed of unconsolidated silt, sand and gravel.
- Qb** Active beach deposits; composed mainly of loose sand, well-sorted, fine-to coarse-grained.
- Qe** Active coastal eolian (sand dune) deposits, consist of loose sand and silt.
- Qes** Active coastal estuarine deposits; composed of submerged/saturated silty clay.
- Qht** Latest Holocene stream terrace deposits, deposited in point bar and overbank settings associated with unit Qw; composed of unconsolidated, poorly sorted, clayey sand and sandy clay with gravel.
- Qha** Latest Holocene alluvial deposits, deposited as overbank material associated with unit Qw, recognized by scour and incised channeling features; composed of unconsolidated, poorly sorted, clayey sand with some gravel. May include terrace deposits (Qht).
- Qhw₃** Holocene wash deposit; composed of unconsolidated sand, silt and gravel.
- Qht₃** Holocene stream terrace deposits, deposited in point bar and overbank settings associated with unit Qhw₃; composed of unconsolidated clayey sand and sandy clay with gravel.
- Qha₃** Holocene alluvial deposits, deposited as overbank material associated with unit Qhw₃, recognized by scour and incised channeling features; composed of unconsolidated, poorly sorted, clayey sand with some gravel.
- Qhw₂** Holocene wash deposit; composed of unconsolidated sand, silt and gravel.
- Qha₂** Holocene alluvial deposits, deposited as overbank material associated with unit Qhw₂, recognized by scour and incised channeling features; composed of unconsolidated, poorly sorted, clayey sand with some gravel.
- Qhw₁** Holocene wash deposit; composed of unconsolidated sand, silt and gravel.
- Qht₁** Holocene stream terrace deposits, deposited in point bar and overbank settings associated with unit Qhw₁; composed of unconsolidated clayey sand and sandy clay with gravel.
- Qha₁** Holocene alluvial deposits, deposited as overbank material associated with unit Qhw₁, recognized by scour and incised channeling features; composed of unconsolidated, sandy clay with some gravel.
- Qhf** Holocene alluvial fan deposits, includes active fan deposits, deposited by streams emanating from mountain canyons to the north onto the alluvial valley floor; deposits originate as debris flows, hyperconcentrated mudflows or braided stream flows; composed of moderately to poorly sorted and moderately to poorly bedded sandy clay with some silt and gravel.
- Qhff** Holocene alluvial fan deposits, fine facies; fine-grained alluvial fan and flood plain overbank deposits on very gently sloping portions to the valley floor; composed of predominantly clay with interbedded lenses of coarser alluvium (sand and occasional gravel).

CORRELATION OF MAP UNITS

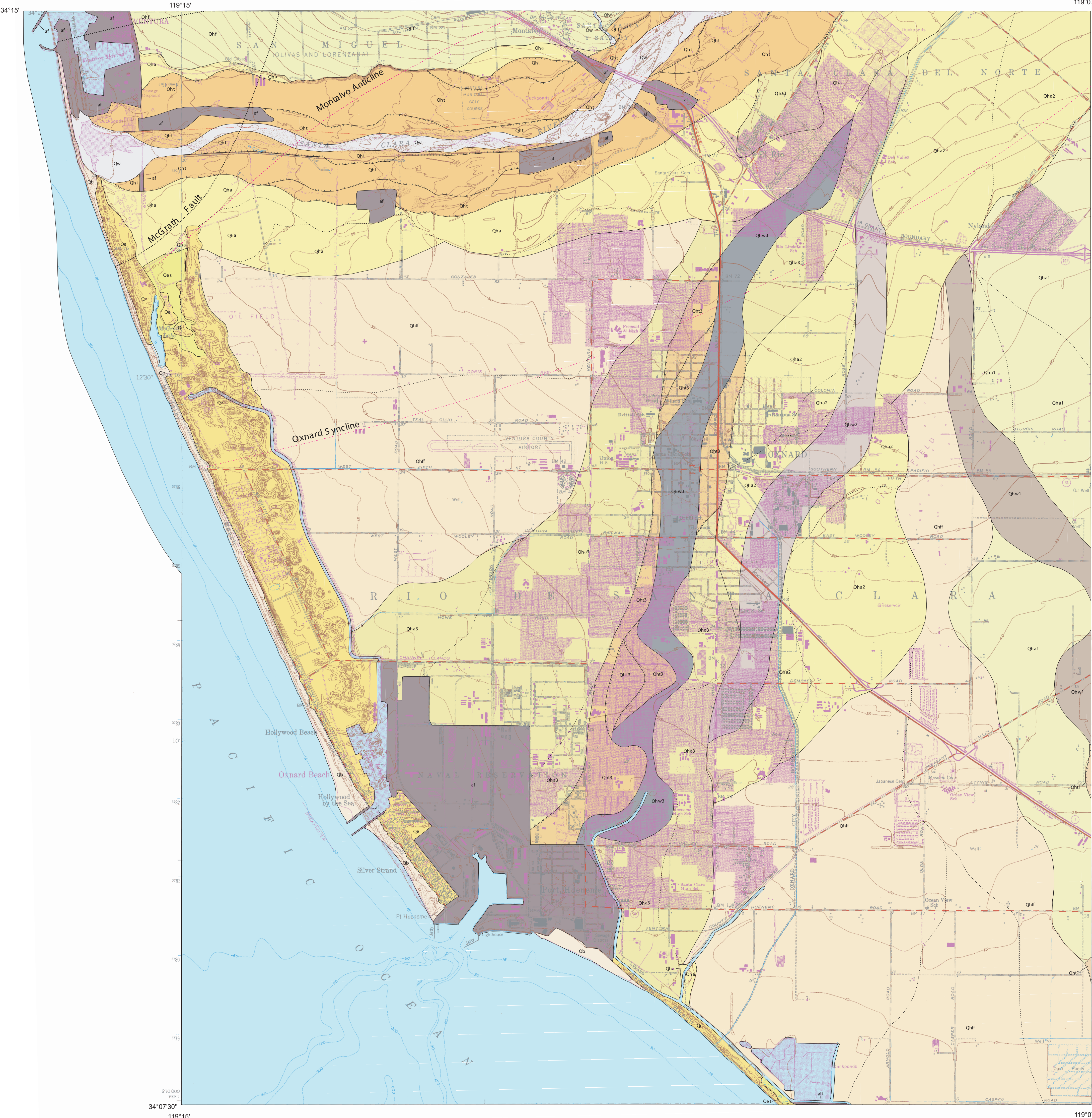


MAP SYMBOLS

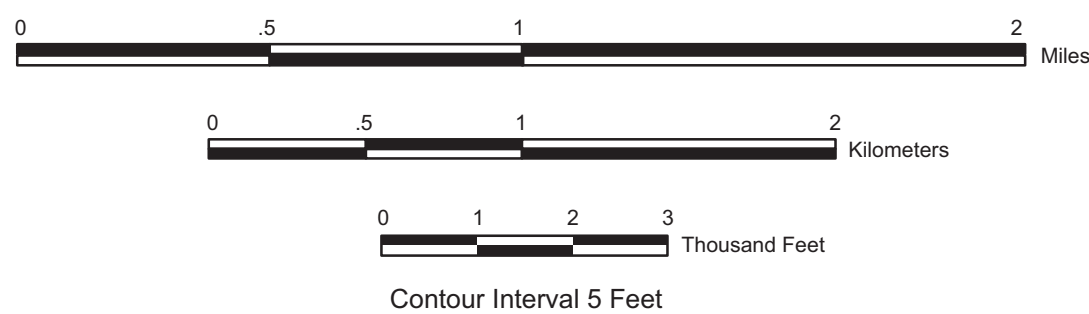
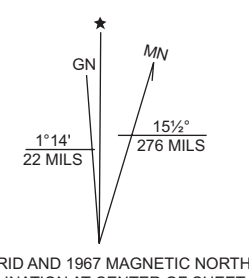
- Contact between map units of different relative age; generally approximately located.
- Contact between terraced alluvial units; hachures point towards topographically lower surface.
- Contact between similar map units; generally approximately located.
- Fault; dotted where concealed.
- Axis of anticline; dotted where concealed.
- Axis of syncline; dotted where concealed.

REFERENCES

- California Division of Mines and Geology, 1975, Seismic hazards study of Ventura County, California: California Department of Conservation, Division of Mines and Geology Open-File Report 76-5, 396 p., 9 plates.
- Edwards, R.D., Rabey, D.F. and Kover, R.W., 1970, Soil survey of the Ventura area, California: U.S. Department of Agriculture, Soil Conservation Services, 151 p., scale 1:24,000.
- Huffile, G.J. and Yeats, R.S., 1995, Convergence rates across a displacement transfer zone in the western Transverse Ranges, Ventura Basin, California: Journal of Geophysical Research, v. 88, No. B2, p. 2043-2067.
- Hitchcock, C.S., Helms, J.D., Randolph, C.E., Lindvall, S.C., Weaver, K.D., and Lettis, W.R., 2000, Liquefaction hazard mapping, Ventura County, California: Final Technical Report, U.S. Geological Survey, Award 99-HQ-GR-0117, 21 p., 4 plates.
- Loyd, R.C., 2002, Liquefaction zones in the Oxnard 7.5-minute quadrangle, Ventura County, California: California Geological Survey, Seismic Hazard Zone Report 052, Section 1, 13 p.
- McCoy, G. and Sama-Wojcicki, A.M., 1978, Preliminary map showing surficial materials of the Ventura-Oxnard plain area, California: U.S. Geological Survey Open-File Report 78-1065, scale 1:125,000.
- Namson, J.S., 1987, Structural transect through the Ventura Basin and Western Transverse Ranges: Society of Economic Mineralogists and Paleontologists, Pacific Section Guidebook 48A, p. 29-41.
- Sama-Wojcicki, A.M., Williams, K.M. and Yerkes, R.F., 1976, Geology of the Ventura fault, Ventura County, California: U.S. Geological Survey Miscellaneous Field Studies, Map MF-781, 3 sheets, scale 1:6,000.
- Tinsley, J.C., Youd, T.L., Perkins, D.M. and Chen, A.T.F., 1985, Evaluating liquefaction potential in Zion, J.I., editor, Evaluating earthquake hazards in the Los Angeles Region, an earth-science perspective: U.S. Geological Survey Professional Paper 1360, pp. 263-315.
- Weber, F.H., Jr., Cleveland, G.B., Kahle, J.E., Kiessling, E.W., Miller, R.V., Mills, M.F., Morton, D.M., and Olweck, B.A., 1973, Geology and mineral resources study of southern Ventura County, California: California Division of Mines and Geology, Preliminary Report 14, 102 p., scale 1:48,000.
- Yeats, R.S., 1983, Large-scale Quaternary detachments in Ventura Basin, Southern California: Journal of Geophysical Research, v. 88, no. B1, p. 569-583.
- Yeats, R.S., Huffile, G.J. and Grigsby, F.B., 1988, Oak Ridge fault, Ventura fold belt, and the Sesar décollement, Ventura Basin, California: Geology, v. 16, p. 1112-1116.
- Yeats, R.S., 1988, Late Quaternary slip rate on the Oak Ridge fault, Transverse Ranges, California: Implications for seismic risk: Journal of Geophysical Research, v. 93, No. B10, pp. 12,137-12,149.
- Yeats, R.F., 1989, Oak Ridge fault, Ventura Basin, California: Slip rates and late Quaternary history: U.S. Geological Survey Open-File Report 89-343, 30 p.
- Yeats, R.F. and Rockwell, T.K., 1991, Quaternary geology of the Ventura and Los Angeles basins, California: in Morrison, R.B., editor, Quaternary nonglacial geology: Continental U.S.: Geological Society of America, DNAG v. K-2, p.185-189.
- Yerkes, R.F., Sama-Wojcicki, A.M., and Lajoie, K.R., 1987, Geology and Quaternary deformation of the Ventura area: U.S. Geological Survey Professional Paper 1339, p. 169-178, Plate 11.1, scale 1:24,000.
- Ziony, J.I. and Yerkes, R.F., 1985, Evaluating earthquake and surface faulting potential in Zion, J.I., editor, Evaluating earthquake hazards in the Los Angeles Region, an earth-science perspective: U.S. Geological Survey Professional Paper 1360, p. 43-61.
- Ziony, J.I. and Jones, L.M., 1989, Map showing late Quaternary faults and 1978-84 seismicity of the Los Angeles region, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1964, scale 1:250,000.



Topographic base from
the U.S. Geological Survey
UTM Projection



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